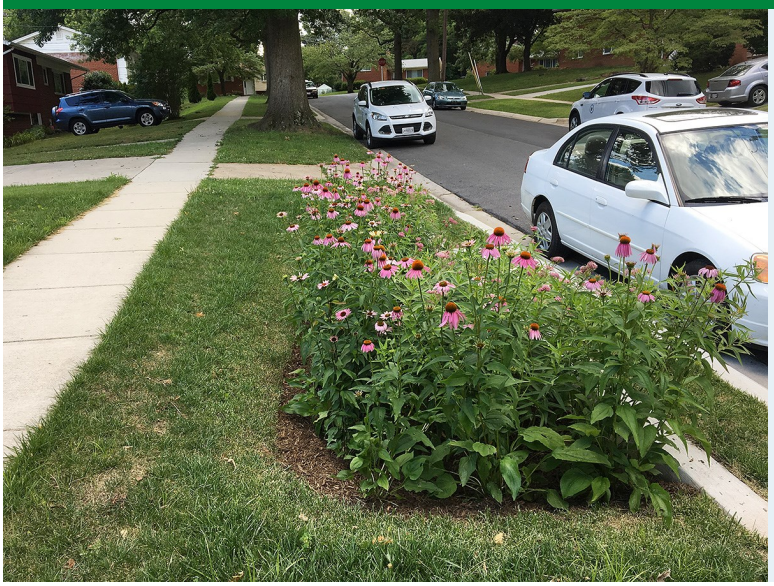
Franklin Knolls 3&4

Green Streets

DEPARTMENT OF ENVIRONMENTAL PROTECTION

MONTGOMERY COUNTY MARYLAND



Quick Facts

Watershed:	Anacostia River
Sub-Watershed:	Northwest Branch
Completion Year:	2016
Impervious Area Treated:	18.1 acres
Maryland DNR Trust Fund Grant Award:	$1,800,000

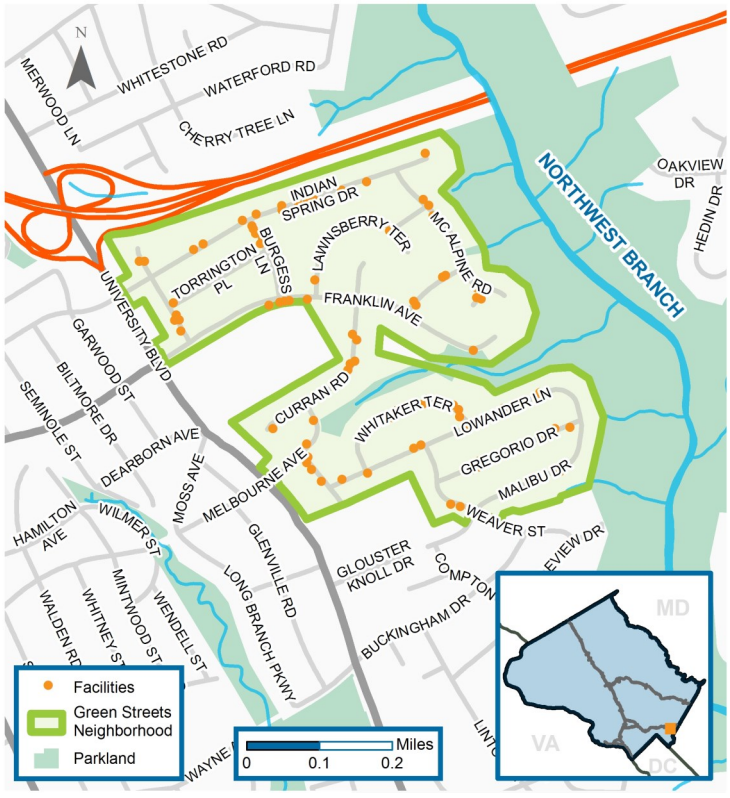
Pre-Restoration Conditions

Much of the development in the lower Northwest Branch watershed occurred before today's stormwater management practices were in place. In older neighborhoods, stormwater runs off roofs, driveways, and roads into storm drains and directly into streams, carrying trash, oils, nutrients, and other pollutants. The runoff also moves rapidly over paved surfaces, causing higher flows during storms, flash flooding, erosion, streambank instability, and degraded habitat.

Design Approach

The Franklin Knolls neighborhood did not have any stormwater treatment prior to the start of the project. However, it did have the potential for implementation of new methods of stormwater management. The grassy areas next to the road curbs within the rights-of-way presented opportunities for treating stormwater before it enters the storm drain system.

Raingardens, bioretention, and tree boxes were installed in the neighborhood. These slow down and filter stormwater runoff flowing off the roadway. Sediment, nutrients, and other pollutants are removed and the volume of runoff is reduced. Captured stormwater infiltrates into the ground, helping recharge local streams and provide healthy habitat for fish.

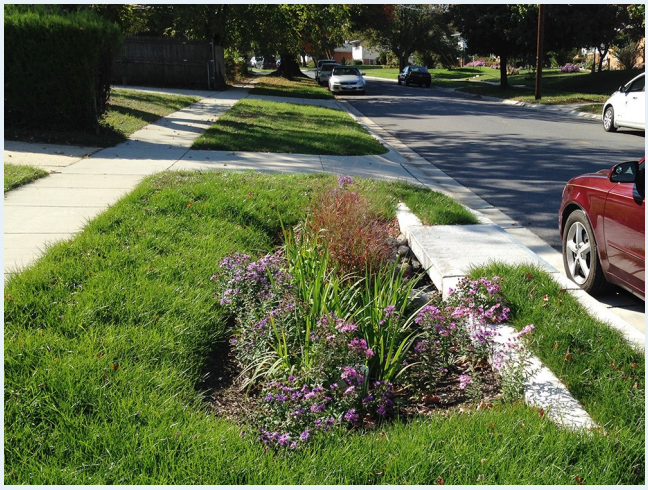


Water Quality Protection

DEP restoration projects help reduce sediment and nutrient pollution entering local waterways and the Chesapeake Bay.

Nitrogen	Phosphorus	Sediment
Reduced	Reduced	Reduced
107	**9.24**	**4590**
lbs/yr	lbs/yr	lbs/yr

Planting



Asters planted in a raingarden provide fall interest. The foliage of iris and switchgrass provide a backdrop.

Planting

Switchgrass is frequently planted at inlets to help filter sediment and debris from runoff.

Before

The large open grassy area in the right-of-way along East Franklin Avenue was an opportunity for treating runoff.

After

A series of bioretention facilities were installed to treat runoff from the road and sidewalk.

Design

Raingardens were installed in the right-of-way between the road curb and property lines or sidewalks.

Design

For Phases 3 and 4, a curb was used along one edge of the gardens to increase volumes and facilitate parking.

Contact Us:

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MONTGOMERY COUNTY 1776 MARYLAND

MARYLAND DEPARTMENT OF NATURAL RESOURCES

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